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09/398,106	09/16/1999	KENICHI MARUTANI	FUJH-16.361	9635

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EXAMINER

ABELSON, RONALD B

ART UNIT PAPER NUMBER

2666

DATE MAILED: 08/11/2003

118

Please find below and/or attached an Office communication concerning this application or proceeding.

118

# Office Action Summary

Application No.

09/398,106

Applicant(s)

MARUTANI, KENICHI

Examiner

Ronald Abelson

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 9-11 is/are rejected.
- 7) ☒ Claim(s) 3-8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 2666

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 2, 9, and 11 rejected under 35 U.S.C. 102(e) as being anticipated by Baissus (US 6,366,574).

Regarding claims 1, 9, and 11, Baissus teaches a method and apparatus for a synchronization protecting and setting system for signals received in a radio base station (fig. 1) comprising: a first means for generating a first synchronized word detecting window (fig. 15 box B, col. 9 lines 4-11); a

Art Unit: 2666

second means for generating a second synchronized word detecting window, which covers the position of the first synchronized word and is within the same time period as the first synchronized word detecting window (fig. 15 box E, col. 9 lines 24-27); a means for detecting the synchronized word in the first or second synchronized detecting window (fig. 16); and a control means for resetting the position of the second synchronized word detecting window as related to the first synchronized word detecting window under a predetermined condition (col. 9 lines 27-31).

Regarding claim 11, in addition to the limitations previously mentioned, Baissus teaches the second synchronized word window is narrower than the first (fine: four symbols, col. 9 line 24, coarse: six symbols, col. 9 lines 8-9). The shifting of the position of the second detecting window is performed for in response to the acquisition of the signal based upon the coarse window (fig. 15 box B). Once the window has been shifted, the synchronized word can be detected (fig. 15 box E).

Regarding claim 2, the synchronized word is detected in the first window, then the synchronized word is detected within the second window in the next frame. Note, the algorithm for fig. 15 is performed for each frame. Therefore, the synchronized word is detected in the first/coarse window (fig. 15 box B) and in the

Art Unit: 2666

next frame the synchronized word is also detected in the second/fine window (fig. 15 box E).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baissus.

Regarding claim 10, Baissus teaches a method and apparatus for a synchronization apparatus provided in a radio base station (fig. 1) comprising: a first window generator for generating a first synchronized word detecting window (fig. 15 box B, col. 9 lines 4-11); a synchronized word detector for detecting a synchronized word (fig. 16); a second window generator for generating a second synchronized word detecting window, which covers the position of the synchronized word detected by the synchronized word detector as is within the same time period as the first synchronized word detecting window (fig. 15 box E,

Art Unit: 2666

col. 9 lines 24-27); and a register / control means for resetting the position of the second synchronized word detecting window as related to the first synchronized word detecting window under a predetermined condition (col. 9 lines 27-31).

In addition, Baissus teaches that pulse detection is based on an AND condition of the first and second word detecting windows (fig. 15 box B, E, and Acquisition Terminated). Synchronization is achieved only after successfully acquiring the signal in both the coarse and fine synchronization windows.

Baissus is silent on outputting a signal that synchronization has been achieved.

To output a signal once synchronization has been achieved would have been obvious to one of ordinary skill in the art at the time of the invention. One would be motivated to output a signal that synchronization has been achieved since the receiver cannot perform demodulation until synchronization has occurred.

#### ***Allowable Subject Matter***

5. Claims 3-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in

Art Unit: 2666

independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: Regarding claims 3-8, nothing in the prior art of the record teaches or fairly suggests resetting the position of the second synchronized word detecting window, when an error rate is greater than a predetermined value, in combination with the other limitations listed in the claims. In contrast, Baissus teaches stopping the synchronization process for the frame if noise is detected (fig. 15).

#### ***Response to Arguments***

7. Applicant's arguments filed 5/29/2003 have been fully considered but they are not persuasive.

The applicant states, "claim 1 of the present application of the second synchronized word detecting window covers the position of the synchronized word and is within the same time period as the first synchronized word detecting window. This substantially differs from Baissus which disclosed the course estimation over 6 symbols and the fine estimation over 8 symbols" (pg. 6 lines 14-18). However, the fine estimation normally uses 4 symbols for the fine estimation (Baissus: pg. 9 lines 23-26).

Art Unit: 2666

The applicant contends, "there is no description or suggestion in Baissus regarding resetting of the position of the second synchronized word detecting window as related to the first synchronized word detecting window" (applicant: pg. 7 lines 1-3). The examiner disagrees. Referring to fig. 15, once the second synchronized word detecting window (fig. 15 box E) the window may be reset (fig. 15 box UW Detected? answer NO).

In reference to claim 11, the applicant reasserts that the second synchronized word detecting window of Baissus is not narrower than the first (applicant: pg. 7 lines 4-6). The examiner disagrees; see explanation above.

Regarding claim 10 (applicant: pg. 7 lines 10-11), the examiner disagrees with the applicant's contention that claims 1 and 9 are allowable. See explanation above.

### **Conclusion**

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened



Art Unit: 2666

statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

Ronald Abelson  
Examiner  
Art Unit 2666

Application/Control Number: 09/398,106

Page 9

Art Unit: 2666

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August 7, 2003

A handwritten signature in black ink, appearing to be 'Dang Ton', written in a cursive style.

**DANG TON**  
**PRIMARY EXAMINER**